

CONCRETE COTTAGES



PUBLISHED BY
THE ATLAS PORTLAND CEMENT CO.
30 BROAD ST., NEW YORK

CONCRETE COTTAGES

THE demand for small concrete houses has so materially increased since the appearance of our first edition of "Concrete Cottages" that we have found it necessary to revise the publication throughout to meet the requirements of modern house design and the prices for material at this time. Let it here be understood that the prices shown are for the houses which have actually been constructed, but these prices will vary slightly in proportion as the cost of labor and materials vary, which will be, in some instances, greater and some less.

The houses shown in this publication were chosen with the idea of presenting to the prospective house builder a variety of designs showing what has been and can be done in the way of low cost houses constructed of concrete. The front, side and rear views of each house are shown together with the floor plans, specifications and estimate of cost.

The adaptability of concrete for the house, both architecturally and economically, cannot be questioned. A house constructed of concrete throughout is fireproof, safe, sanitary, economical, durable, warmer in winter and cooler in summer. In building a home it is always advisable and more economical to employ competent workmen familiar with concrete construction and to see that your specifications call for first class material in all branches of the work.

Atlas Portland Cement is considered by the leading Architects and Engineers, with special experience in concrete construction, to be the Standard American brand because of its uniform quality and unequalled reputation. It is made from the finest raw materials, under expert supervision. The United States Government purchased 4,500,000 barrels of Atlas Portland Cement for use in the construction of the Panama Canal, which, if delivered at the rate of 5,000 barrels a day, would require about three years to complete the contract. The daily productive capacity of the Atlas plants is over 50,000 barrels, or over 18,000,000 barrels annually, the largest of any cement company in the world.

In response to the growing demand for Portland Cement of a pure white color, we have placed upon the market Non-Staining Atlas White Port-

land Cement. Heretofore white cements have been used largely for interior decorative work, but the value of the material for exterior stucco work and many other purposes, such as Facing Concrete Blocks, Decorative Concrete Stone and Statuary, Wainscoting for Bathroom and Kitchen Walls, etc., has wonderfully increased the scope of its usefulness.

The color of the finished surface is largely that of the cement used, but the color of the sand has a most important influence. We have, therefore, realized the necessity of placing on the market our Atlas-White, mixed with ground white silica sand ready for use. The mixture will be found very convenient in instances where it is difficult to obtain a white sand. Beautiful garden vases of a simple design can be made at home with our Atlas-White Portland Cement. For further particulars refer to the various publications in the Atlas Cement Library.

Books in the Atlas Cement Library:

"CONCRETE HOUSES AND COTTAGES," VOLS. 1 AND 2—These books contain many half-tone cuts (in tint) of photographs together with floor plans for concrete houses ranging in price from \$1,000.00 to \$450,000.00. Vol. 1, Large Houses; Vol. 2, Small Houses. Size, 10 x 12 inches. Copies will be sent, express prepaid.

Price, \$1.00 per volume.

"CONCRETE IN HIGHWAY CONSTRUCTION."—A text-book for highway engineers and supervisors. It contains complete descriptions, drawings and photographs of every phase of highway construction in which concrete plays a part. It is the most valuable book ever published on this subject. Sent free to highway officials and highway engineers.

Price, to others, \$1.00.

"CONCRETE GARAGES."—A valuable book for anyone contemplating the construction of a garage. It contains photographs of many fireproof concrete garages, together with detailed descriptions as to how they may be constructed.

Sent free.

"CONCRETE CONSTRUCTION ABOUT THE HOME AND ON THE FARM."—A book containing directions for making and handling concrete, also many specifications, sectional drawings and photographs of the smaller constructions that can be built by the layman.

Sent free.

"CONCRETE IN RAILROAD CONSTRUCTION."—A text-book for railway engineers, containing detailed descriptions, drawings and many photographs of railroad construction in which concrete is used. This book will be sent free to railroad officials and railroad engineers.

Price, to others, \$1.00.

"REINFORCED CONCRETE IN FACTORY CONSTRUCTION."—A book containing many photographs of concrete factories, sectional drawings and specifications furnished by the engineers in charge of the work. Delivery charge, 10c.



THE ATLAS PORTLAND CEMENT CO.

30 BROAD STREET, NEW YORK

ATLAS PORTLAND CEMENT IS THE STANDARD BY WHICH ALL OTHER MAKES ARE MEASURED





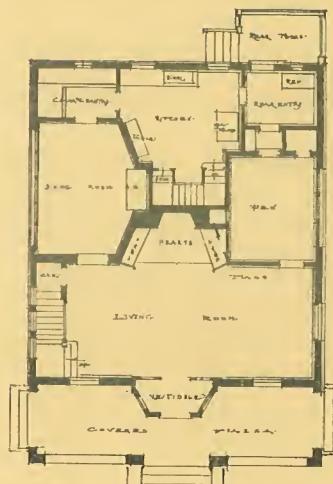
SIDE VIEW

FRONT VIEW

REAR VIEW

RESIDENCE AT WAVERLY, MASS.

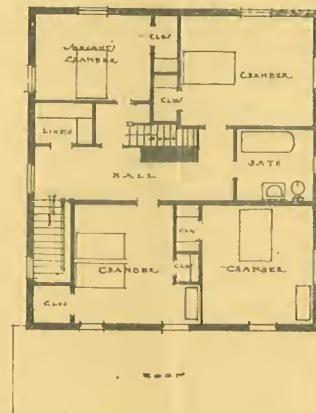
H. W. Hathaway, Architect, 51 Lake St., Arlington, Mass.



SPECIFICATIONS.

The outside walls from footing to roof are of concrete reinforced with steel. There is a 5-inch air space from 2 feet above grade to within 1 foot of plate.

Outside walls were hammered as soon as forms were removed. Inside partitions were 2-inch x 4-inch studs, lathed and plastered with two-coat work.



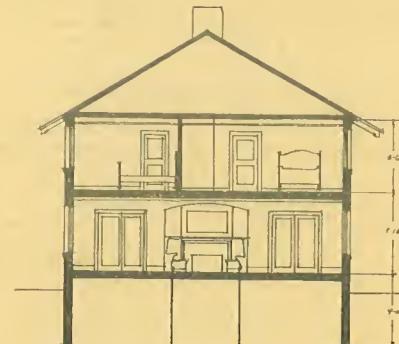
SECOND FLOOR PLAN.

Mill work, cypress and North Carolina pine.

Floors, Georgia rift pine, first floor, and North Carolina rift, second floor.

Floors stained and mill work stained.

Fireplace brick face and hearth.



SECTION.

ESTIMATE.

Excavations and masonry (concrete)	\$1,480.00
Lumber and mill work	1,260.00
Plastering	300.00
Painting	180.00
Roofing (red slate)	240.00
Hardware (finish)	40.00
Heating (furnace)	125.00
Plumbing	275.00
Miscellaneous	900.00
	\$4,800.00



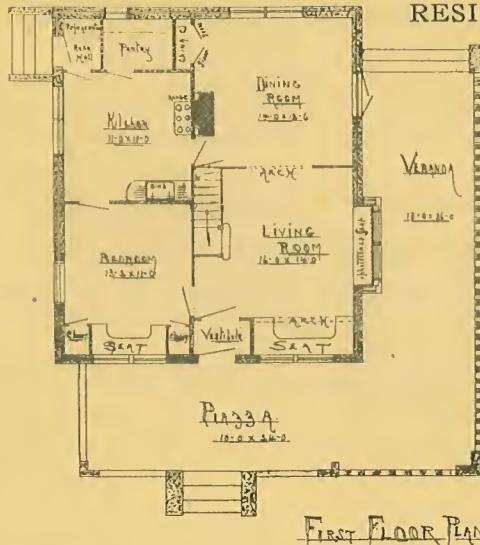
SIDE VIEW

FRONT VIEW

REAR VIEW

RESIDENCE AT MATTAPAN, MASS.

J. J. Smith, Architect,
706 Old South Bldg.,
Boston, Mass.



FIRST FLOOR PLAN.

SPECIFICATIONS.

Foundation walls are monolithic, scoured to a sand finish while the concrete was green, and are 10 inches thick.

Outside walls above foundation are of concrete 4 inches thick, made by setting 2 x 4 studding and filling between the studs with concrete, which is scoured to sand finish while the concrete is green, and batons nailed on the outside to give the appearance of the English style timbered effect.

The chimney and fireplace are of concrete moulded and finished sand floated when green.

Roof is of cement formed in shape of regular clay roof tiles. The rafters are of wood, on which is spread metal lath. This is given a coat of cement mortar containing a little lime and hair to keep it from falling through the metal lath; when set another coat of the same mortar is applied to the under side.

The outside steps are of reinforced concrete, as is also the piazza floor.

This piazza floor is troweled to a granolithic finish.

The inside finish is of white wood, stained, and the floors are of North Carolina matched boards.

The plumbing is first-class open work, with laundry in cellar.

The heating is by hot-air furnace. The inside partitions are of wood.

ESTIMATE.

Excavating	\$35.00
Foundation and cement work	750.00
Lumber and carpenter labor	540.00
Mill work, etc.	350.00
Inside plastering	270.00
Painting	125.00
Hardware	55.00
Gas and electric	60.00
Plumbing and heating	320.00
	\$2,505.00



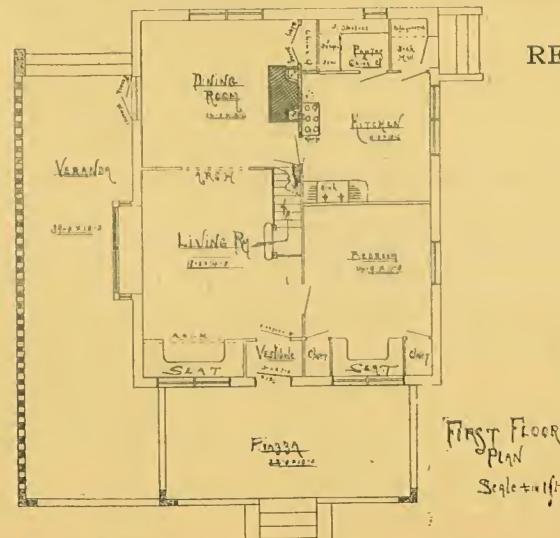
SIDE VIEW

FRONT VIEW

REAR VIEW

RESIDENCE AT QUINCY, MASS.

J. J. Smith, Architect,
706 Old South Bldg.,
Boston, Mass.



SPECIFICATIONS.

Foundation walls are monolithic scoured to a sand finish while the concrete was green and are 10 inches thick.

Outside walls above foundation are of concrete, 4 inches thick, made by setting 2 x 4 studding and filling between the studs with concrete, which is scoured to sand finish while the concrete is green.

The chimney and fireplace are of con-

crete moulded and finished sand floated when green.

Roof is of cement formed in shape of regular clay roof tiles. The rafters are of wood, on which is spread metal lath. This is given a coat of cement mortar containing a little lime and hair to keep it from falling through the metal lath; when set another coat of the same mortar is applied to the under side.

The outside steps are of reinforced con-

crete, as is also the piazza floor. This piazza floor is troweled to a granolithic finish.

The inside finish is of white wood, stained, and the floors are of North Carolina matched boards.

The plumbing is first-class open work, with laundry in cellar.

The heating is by hot-air furnace.

The inside partitions are of concrete.

ESTIMATE.

Excavating	\$35.00
Foundation and cement work...	750.00
Lumber and carpenter labor....	540.00
Mill work, etc.....	350.00
Inside plastering.....	270.00
Painting	125.00
Hardware	55.00
Gas and electric.....	60.00
Plumbing and heating.....	320.00
	\$2,505.00



SIDE VIEW

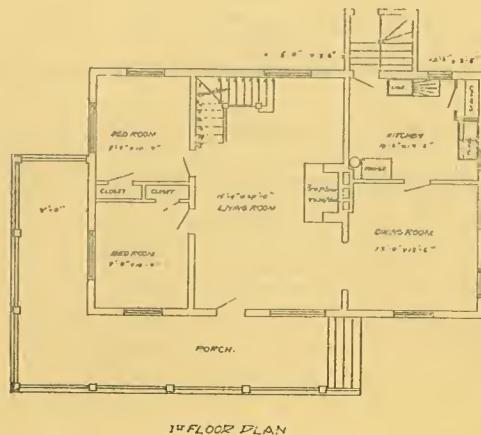
FRONT VIEW

REAR VIEW

RESIDENCE AT HAWORTH, N. J.

Bayard Wight, Architect, 35 W. 34th St., New York.

Haworth Stone & Sand Co., Builder, Haworth, N. J.

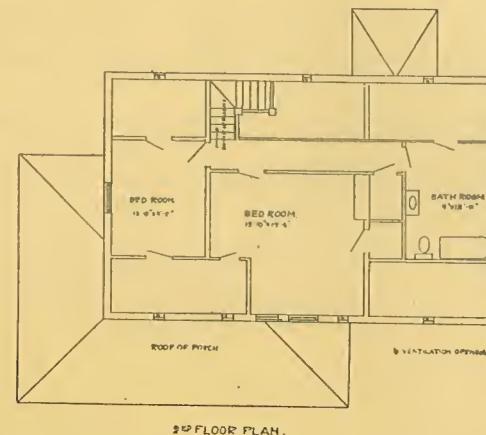


SPECIFICATIONS.

The foundation walls, house and porch roof, first floor, porch floor, porch columns, panels and dormer are built of reinforced concrete comprised of a mixture of 1 part cement, 2 parts sand and 5 parts cleaned steam ashes reinforced with lock woven fabric. The reason that steam ashes were used for the roof aggregate in the concrete was that they

were the most available material and in addition they give a concrete which is superior for house walls on account of the greater porosity of such concrete, which reduces the likelihood of condensation.

All exterior surfaces were finished with cement mortar and washed and stippled with cement and water. The interior of the outside walls was lathed and plastered. Over the fireproofed first floor was



ESTIMATE

Excavation and grading.....	\$35.00
Concrete and mason work.....	2,760.00
Carpenter work, including floors and trim and partitions.....	776.00
Interior painting.....	75.00
Plumbing and heating.....	475.00
 Total	 \$4,121.00



SIDE VIEW

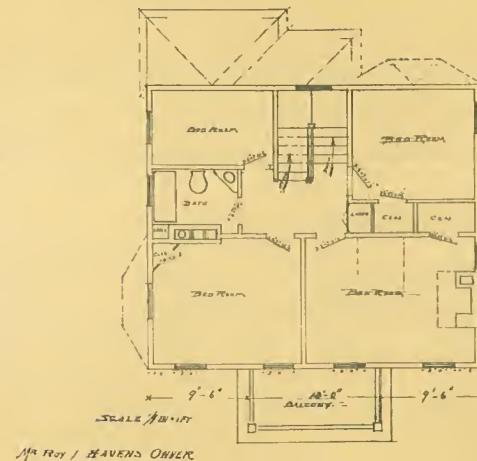
FRONT VIEW

REAR VIEW

RESIDENCE AT POINT PLEASANT, N. J.

S. G. Slocum, Architect,
1170 Broadway,
New York.

Edward Erickson, Builder,
Point Pleasant, N. J.



SPECIFICATIONS.

Outside walls to be of concrete, monolithic construction, float finish.
Reinforced lintels over large openings.
Basement walls 10 inches thick.
Above basement 9 inches thick.
Furred and plastered inside.
Outside window sills cast to form drip.
Outside color scheme gray cement.
Roof asbestos shingle.
Woodwork dark reddish brown.
Concrete chimneys.
Inside partitions, first story, 2 x 4 studs, lath and plaster.
Lintels over openings to have light reinforcement.
Inside partitions in basement which are bearing to be 9-inch concrete.

Second-story inside partitions 2 x 4-inch wood studs with lath and plaster.

Wood joists and rafters, every third joist anchored into wall.

Underfloor of $\frac{3}{8}$ -inch boards, $\frac{3}{8}$ -inch sheathing.

Plates under rafters, anchored into wall.

Finished floor in living room and hall to be oak, kitchen and pantry to be yellow pine.

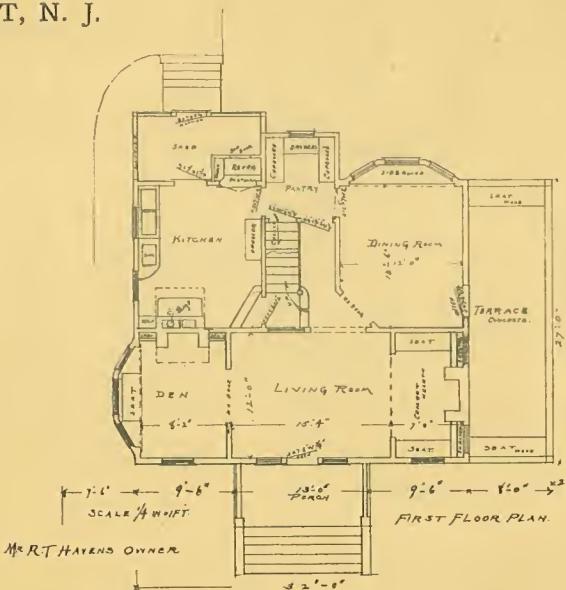
Cement floor in bathroom.

Remainder of first and second story floors of yellow pine.

Cement floor in basement and porch.

Finish throughout, except bathroom, to be yellow pine for staining; bathroom white wood for enamel.

Plaster in hall, living room and large



bedroom to be sand finish, remainder of plaster hard white finish.

ESTIMATE.

Excavating	\$120.00	
Concrete walls, partitions, window sills and chimney caps	1,175.00	
Carpentry and interior finish	1,580.00	
Plastering	385.00	
Sheet metal	\$0.00	
		\$4,290.00



SIDE VIEW



FRONT VIEW

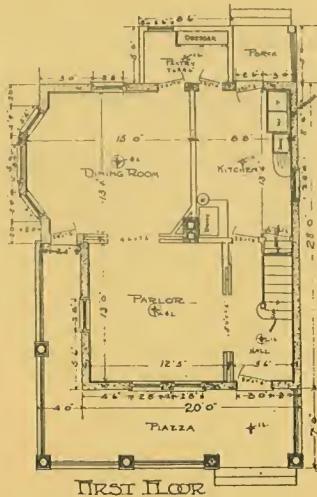


REAR VIEW

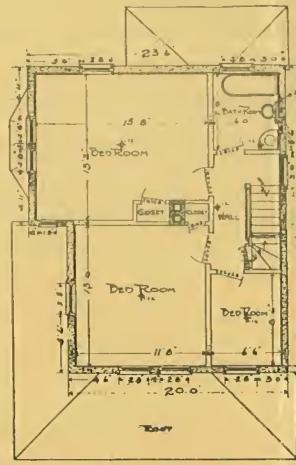
RESIDENCE AT HARRINGTON PARK, N. J.

Carl P. Johnson, Architect, 8 E. 42d St., New York.

Carlson & Carlson, Builders, Harrington Park, N. J.



FIRST FLOOR



SECOND FLOOR

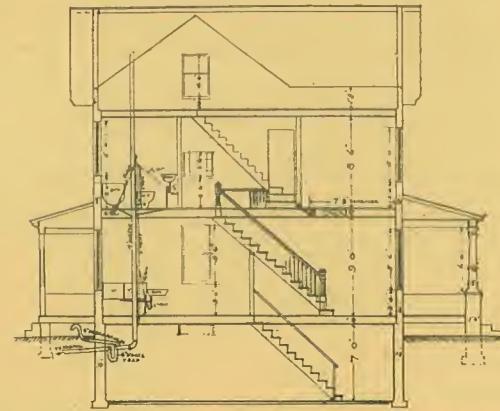
SPECIFICATIONS.

Outside walls cast of concrete monolithic construction; floor and all outside steps is concrete, cellar walls 10 inches thick, first and second floor walls 8 inches thick, furred on the inside with

wood furring strips, and plastered two coats on Sackett plaster boards. Outside walls stuccoed rough finish, stained white. Chimney with flue lining of concrete.

Roof galvanized Spanish metal tiles, laid on boards, on top of building paper,

and painted red; window sashes painted white, all outside window frames and wood painted light green. Floors in first, second and attic North Carolina pine No. 1; trim throughout chestnut, finished natural.



LONGITUDINAL & PLUMBING SECTION

ESTIMATE.

Excavation	\$35.00
All concrete work	1,110.00
Lumber, mill work and interior finish	1,075.00
Plastering	275.00
Roof and metal work	265.00
Hardware	50.00
Electric wiring	40.00
Painting and staining	100.00
Miscellaneous	50.00

\$3,000.00

(Plumbing and heating done by owner.)



REAR VIEW

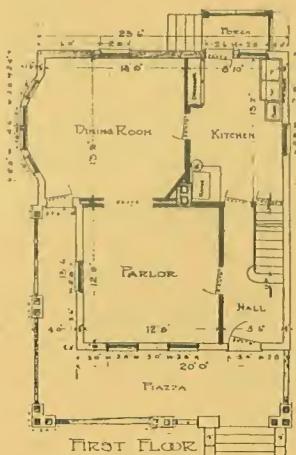
FRONT VIEW

SIDE VIEW

RESIDENCE AT HARRINGTON PARK, N. J.

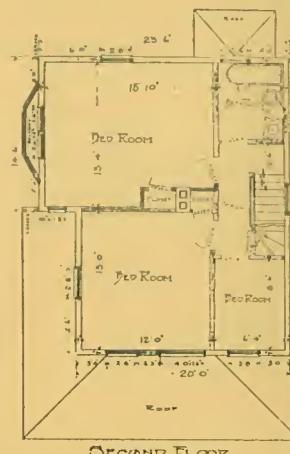
Carl P. Johnson, Architect, 8 E. 42d St., New York.

Carlson & Carlson, Builders, Harrington Park, N. J.



SPECIFICATIONS.

Outside walls cast of concrete monolithic construction, reinforced lintels over large openings, cellar floor, and all outside steps, piazza railings and columns solid concrete; cellar walls 10 inches thick, first and second floor walls 8

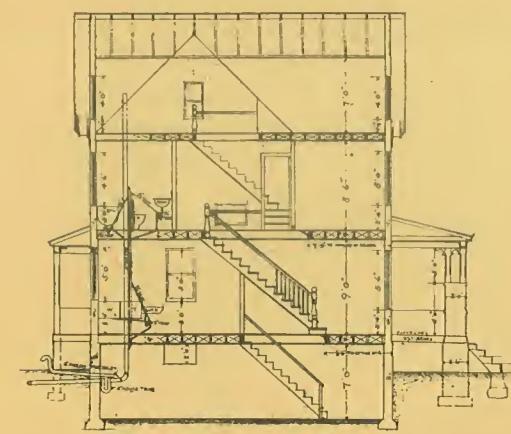


SECOND FLOOR

inches thick, furred on the inside by 1-inch x 2-inch furring and plastered on sackett plaster boards. Outside walls finished smooth, gables stuccoed.

Roof galvanized, Spanish metal tiles, laid on sheathing boards on top of paper, and painted red; window sashes painted white, outside window frames and cor-

nices painted reddish brown. Inside partitions 2-inch x 4-inch wood studs covered with plaster boards and plastered, all floor beams and rafters cast into the concrete walls. First, second and attic floors North Carolina pine No. 1; trim throughout cypress, all finished natural.



ELEVATION AND LONGITUDINAL SECTION

ESTIMATE.

Excavation	\$35.00
All concrete work	1,250.00
Lumber, mill work and interior finish	975.00
Plastering	260.00
Roof and metal work	290.00
Hardware	40.00
Electric wiring	50.00
Painting and staining	110.00
Plumbing and steam heating	585.00
	\$3,595.00



REAR VIEW



SIDE VIEW

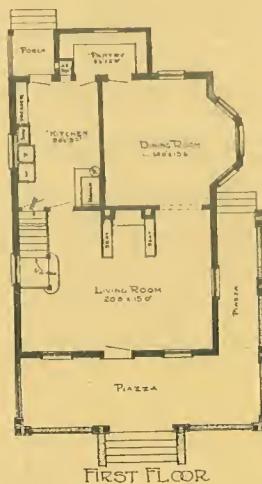


FRONT VIEW

RESIDENCE AT MAYWOOD, N. J.

Carl P. Johnson, Architect, 8 E. 42d St., New York.

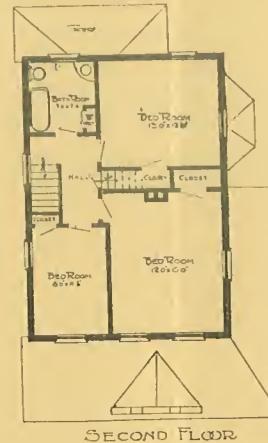
Carlson & Carlson, Builders, Harrington Park, N. J.



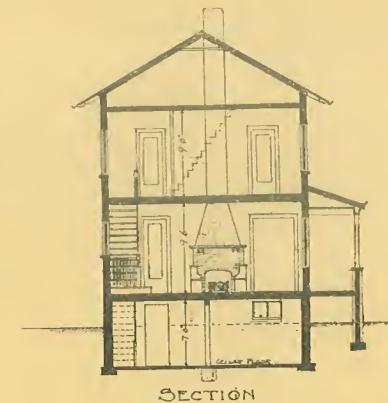
SPECIFICATIONS.

Outside walls cast of concrete monolithic construction, reinforced over large openings, concrete cellar floors, all outside steps, piazza railings and floors solid concrete; cellar walls 10 inches

thick, first and second floor walls 8 inches thick, furred on the inside by 1-inch x 2-inch furring lathed with spruce lath and plastered three coats of patent plaster. Outside walls stuccoed rough finish on natural cement finished. Roof of red asbestos shingles, laid French



SECOND FLOOR



SECTION

ESTIMATE.

Excavation	\$40.00
All concrete work.....	1,400.00
Lumber, mill work and interior finish	1,000.00
Plastering	350.00
Hardware	50.00
Electric wiring and gas pipes...	65.00
Asbestos roof.....	175.00
Plumbing and steam heating...	600.00
Painting	150.00
	\$3,830.00



SIDE VIEW

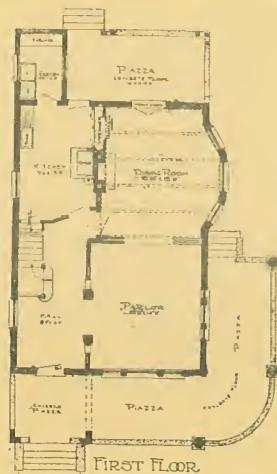
FRONT VIEW

REAR VIEW

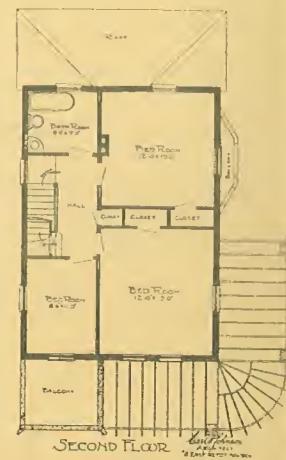
RESIDENCE AT HARRINGTON PARK, N. J.

Carl P. Johnson, Architect, 8 E. 42d St., New York.

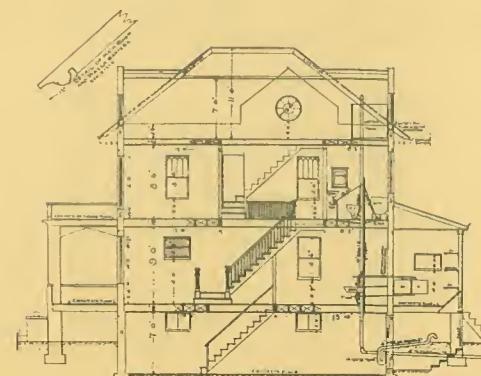
Carlson & Carlson, Builders, Harrington Park, N. J.



FIRST FLOOR



SECOND FLOOR



RUBBING AND LONGITUDINAL SECTION

SPECIFICATIONS.

Outside walls cast of concrete monolithic construction, reinforced lintels over large openings, cellar floor, and all outside steps, piazza railings, columns and piazza floor all solid concrete. Cellar walls 10 inches thick, first and second floor walls 8 inches thick, furred on the inside and plastered three coats of King's Winsor cement on Sackett plaster boards. Outside walls stuccoed, rough finish, stained white; chimney with flue lining cast of concrete. Mantel in dining room

cobble stone. Roof galvanized, Spanish metal tiles, laid on sheathing boards on top of building paper and painted red; window sashes painted white, outside window frames and rafters painted dark green. Inside partition 2-inch x 4-inch wood studs covered with plaster boards and plastered with King's Winsor cement plaster. All floor beams and rafters cast into the concrete wall. All floors North Carolina pine No. 1. Dining room has French doors to rear piazza, beam ceiling and plate shelf; all trim in din-

ing room stained golden oak, small window in bay leaded glass; all trim in first and second floor ash, and birch on paneled doors. Trim in parlor and hall stained bronze green; side windows in parlor has clear leaded glass, with coat-of-arms in colored leaded glass. Trim in second floor and attic finished natural; all hardware solid brass; attic has three bedrooms, trimmed in ash; every bedroom has a large closet; medicine chest in bathroom, cast in concrete wall. Kitchen range has an ash chute to cellar.

ESTIMATE.

Excavation	\$55.00
All concrete work	1,665.00
Lumber, mill work and interior finish	1,485.00
Plastering	480.00
Roof and metal work	335.00
Hardware	70.00
Electric wiring	60.00
Painting and staining	200.00
Plumbing and heating	650.00
	\$5,000.00



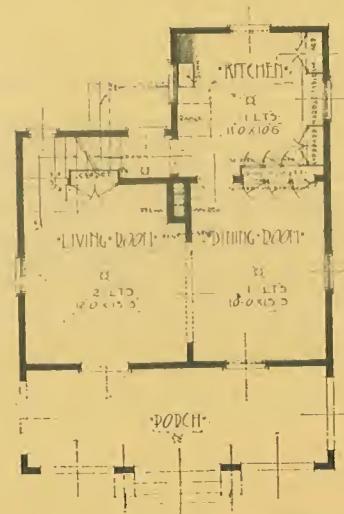
SIDE VIEW

FRONT VIEW

REAR VIEW

RESIDENCE AT VIRGINIA HIGHLANDS, WASHINGTON, D. C.

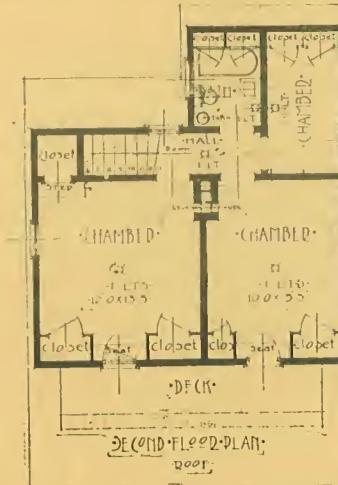
Milton Dana Morrill,
Architect and Builder,
Corcoran Building, Washington, D. C.



SPECIFICATIONS.

This estimate is based on outside walls 6 inches in thickness, reinforced with $\frac{1}{4}$ -inch bars above and below windows with 9-inch foundation walls. Cellar under the front portion of the house; a waterproof course of hot tar and felt being bedded in the walls above grade, the exterior being covered with a waterproof brush coating of white cement, waterproofing

compound and earth colors. The walls are plastered directly on the concrete, giving a brown-sand finish. Floors are of wood. Interior is finished in Virginia pine trim stained a tobacco brown. Roofs are covered with cypress shingles. The house is wired for electric lights, and furnace and range for hot and cold water and bathroom complete. All woodwork is of the craftsman design, with flat surfaces stained.



ESTIMATE.

Excavation	\$25.00	Plastering	100.00
Erection of forms and scaffold...	104.74	Plumbing	150.00
Placing concrete	83.15	Heating and range	100.00
Cost of concrete materials, including gravel at 60c. per yard, sand at \$1.10 per yard and cement at \$1.04 per barrel	137.10	Lumber and mill work	334.42
Painting	100.00	Carpentry labor	175.00
		Electric wiring	25.00
		Hardware	20.00
			\$1,354.41



SIDE VIEW



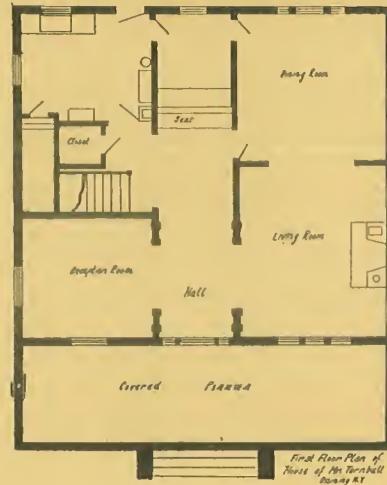
FRONT VIEW



REAR VIEW

RESIDENCE AT OSSINING, N. Y.

Fred P. Stafford,
Architect and Builder,
Briarcliff, N. Y.



SPECIFICATIONS.

Method of Construction: Monolithic construction will be used with the exception of floors and partitions. The exterior walls will be of reinforced concrete 6 inches thick, furred inside 4 inches, with the rough lumber that was used in the forms.

Foundations: The foundations will be 9 inches of reinforced concrete, and will extend below the frost line where not excavated. Partitions in both will be of 3-inch concrete blocks, as suggested by programme. The forms will be of 5-inch

slabs, with necessary beams and girders.

Stairs and Cellar: The stairs will be of concrete, with wooden treads and risers, with the exception of cellar stairs, which are to have cement finish. The cellar will have a cement floor. It will be lighted and ventilated by area windows on side of house.

Description: This scheme lends itself to the typical suburban lot, with ample room on the side for gardens.

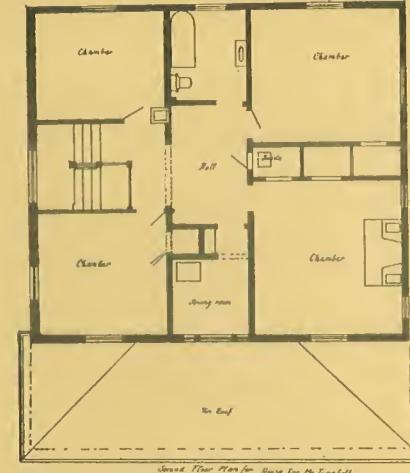
In order to attain an interesting texture for the exterior walls we suggest that while concrete is being placed in forms the part next to the forms be

pressed back with shovels, thus allowing the smaller stones and concrete to work their way to the front, giving a texture-like pebble-dash.

This method has been used several times very successfully. Small chips of brick and warm colored stone might be added to the other aggregates.

The inside of the house will be plastered. Fireplace will be solid concrete. Whatever other decorations are used, they should be quiet and in keeping with the character of the house.

Concrete and cement have been used wherever feasible.



ESTIMATE.

Gas	\$50.00
Electric light fixtures	200.00
Heating	450.00
Plumbing	600.00
Excavation	50.00
Concrete	2,200.00
Lumber	500.00
Mill work	500.00
Plastering	450.00
Painting and glazing	100.00
Hardwood	60.00
	\$5,160.00



SIDE VIEW



FRONT VIEW

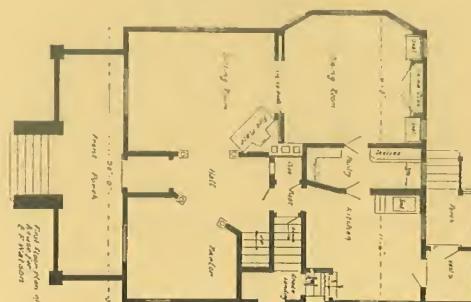


REAR VIEW

Radford Architectural Co., Architects, Chicago, Ill.

RESIDENCE AT DUMONT, N. J.

Oscar Neilson, Builder, Dumont, N. J.



SPECIFICATIONS.

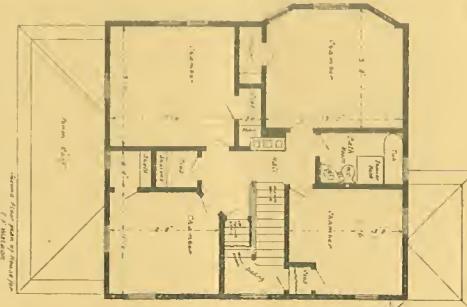
All exterior walls (except concrete foundation walls and piers) are to be constructed with hollow concrete blocks and an exterior surface of "rough cast" stucco.

All lintels to be of reinforced concrete cast in place.

Basement floor surface and cellar entrance to be of concrete.

All side walls and ceilings to be furred, lathed and plastered with two coats, except in cellar.

Porches and exterior steps to be of



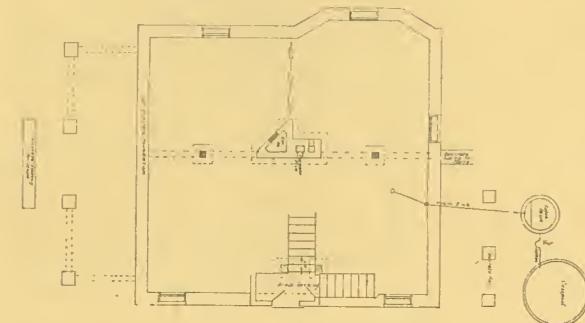
concrete, with reinforced concrete porch floor, constructed as follows: 6-inch I-beams, 4 inches apart, 6 inches of concrete laid in triangular mesh reinforcement finished with 1-inch top dressing.

Roof to be shingled with best 18-inch white cedar shingles laid 5 inches to the weather and stained green.

First floor trim to be chestnut throughout, stained Flemish oak, except kitchen, which will be white enamel.

Second floor to be in white wood, with white enamel finish.

Chimneys to have flue lining; sitting



room fireplace to be built of red tapestry brick. Kitchen chimney in white enamel brick.

First floor beams, 2 inches x 10 inches; second floor beams, 2 inches x 8 inches; rafters, 2 inches x 6 inches. All floors double, with comb grained North Carolina pine finish.

Floor trim to be chestnut first floor, cypress second.

Roof and dormers to be shingled, stained before using.

All plumbing fixtures to be standard.

Heating to be hot-water system.

ESTIMATE.

Excavation and grading.....	\$60.00
Concrete and all mason work...	2,320.00
Carpentry.....	650.00
Lumber and trim.....	1,290.00
Painting.....	165.00
Hardware.....	85.00
Plumbing and heating.....	760.00
Tin work.....	74.00
Wiring.....	40.00
	\$5,454.00



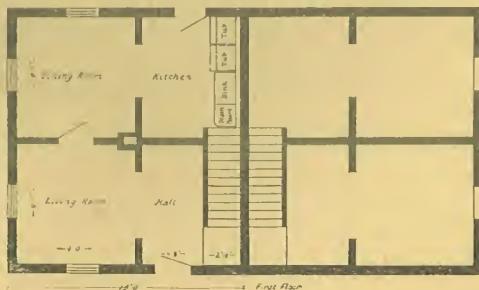
SIDE VIEW

FRONT VIEW

REAR VIEW

TWO-FAMILY HOUSE AT BRIARCLIFF, N. Y.

Fred P. Stafford, Architect and Builder, Briarcliff, N. Y.



SPECIFICATIONS.

It is proposed to build the semi-detached houses, accompanied herewith, for the sum of five thousand dollars (\$5,000.00), or the half of that sum for one house.

Monolithic concrete construction will be used throughout the building, and on the outside face shall be stucco, plastered smooth.

Inside partitions throughout shall be of solid concrete, on which the plaster shall be directly applied.

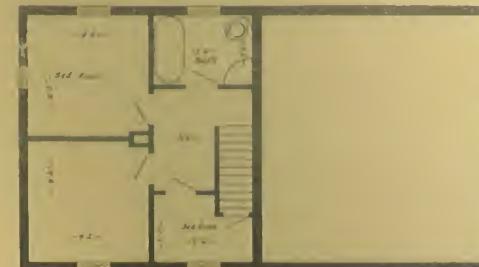
Plastering, two (2) coat work.

Floors to be solid reinforced concrete.

Mill work, Tennessee poplar.

Oak for first floor, hard rift pine for second.

Porch to be solid concrete throughout.



ESTIMATE.

Heating	\$500.00
Plumbing	700.00
Excavation, concrete, walls and partitions	2,160.00
Lumber, carpentry, room, mill work	\$500.00
Painting and glazing	100.00
Plastering	500.00
Miscellaneous hardware and lighting fixtures	40.00
Grading	200.00
	\$5,000.00

THE STANDARD AMERICAN BRAND



NONE JUST AS GOOD

ALWAYS UNIFORM